



Grass Drainage Swale

What is a grass drainage swale?

A grass drainage swale is an open channel that collects water from hard surfaces and allows it to percolate into the ground, reducing the amount of runoff leaving the road or property. The grass covering the side slopes and swale bottom provides a filtration surface for the water and helps to reduce the flow velocity. In steeper areas, some swales have stone, concrete or wood 'check dams' across the width to help slow the flow rate, promote infiltration, and prevent erosion. During large storms, swales can direct extra runoff to other stormwater facilities or the storm drain system. Swales are commonly found along roads, parking lots, or between properties of some residential lots.

Basic Maintenance ...

- ✓ Inspect your swale after storms to make sure that rainwater has drained and there is no erosion.
- ✓ Remove sediment and debris from in and around the swale.
- ✓ Inspect pea gravel diaphragm for clogging and correct the problem (if applicable).
- ✓ Re-plant grass if the original grass cover has not been successfully established.
- ✓ Mow grass to 3-4 inches in height.

Why is it important to maintain these practices?

An unmaintained swale may:

- Stop filtering the rainwater and allow trash and pollutants to enter our local streams.
- Be difficult or expensive to restore if left unmaintained.
- Allow water to pool on the surface long enough to allow insects to breed (longer than 3 days).
- Block the flow of water and cause local flooding.

Performing preventative maintenance regularly will prevent long term damage and reduce costs. It is recommended to weed, remove trash and debris, and mow on a regular basis.

Maintaining your practice will help the environment and protect your local streams and the Chesapeake Bay.

Seasonal Maintenance ...

- ✓ Rototill or cultivate the bottom of the swale does not drain down within 48 hours.
- ✓ Remove sediment build up within the bottom of the swale.
- ✓ Apply fertilizer and lime as necessary in your swale.

As a reminder...

- ✗ Do not construct a fence or structure within the swale.
- ✗ Do not over-mow or mow shorter than 3 inches.
- ✗ Do not mow immediately after a rain event.
- ✗ Do not store material or debris in the swale.
- ✗ Do not fill in the swale.



Can I remove the grass drainage swale?

No, you cannot remove these facilities if they have been required by the County. Harford County maintains a database for all required structures including swales. Harford County is required to conduct an inspection every 3 years. If maintenance issues are found in need of repair, an inspection report will detail those items to be addressed within 30 days from the date of the notice.

Who is responsible for the maintenance?

As the property owner, you are responsible for all maintenance of your grass drainage swale.



Repaired Grass Swale

Recommended Schedule For Typical Maintenance

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Remove Sediment, Leaves & Debris	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mowing				✓	✓	✓	✓	✓	✓			
Repair Eroded Areas	As Needed											

Troubleshooting

<u>Symptom</u>	<u>Possible Cause</u>	<u>Solution</u>
Standing water in the swale	If standing water occurs for over 48 hours, the facility could be clogged or the underdrain may be blocked.	The facility may need to be tilled and replanted, or the pipe may need to be cleaned.
Erosion or bare soil	The runoff is moving too fast and/or the vegetation has died.	Stabilize the soil by planting new vegetation. If needed, use rocks to slow the flow.

Harford County can answer your questions and provide additional guidance on how to maintain your grass swale.

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